

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Cancelled)

9, 2. (Cancelled)

3. (Currently Amended) A substrate for a liquid crystal device comprising:

a base; and

a light reflecting film formed on said base, wherein said pattern is formed by aligning at least one of a plurality of convexities and a plurality of concavities,

said convexities and concavities are pyramid shape in plane section,

said light reflecting film having a pattern that provides light directivity and light scattering, and

~~The substrate for a liquid crystal device according to Claim 2, wherein a spatial shape of said convexities or said concavities along one of two orthogonal axes that pass through said convexities or concavities is different from a spatial shape that extends along the other axis.~~

4. (Currently Amended) A substrate for a liquid crystal device, comprising:

_____ a base;

_____ a light reflecting film formed on said base;

_____ said light reflecting film having a pattern that provides light directivity and light scattering; and

_____ said pattern is formed by aligning at least one of a plurality of convexities and a plurality of concavities, ~~The substrate for a liquid crystal device according to Claim 2,~~

_____ wherein one side of a spatial shape of said convexities or said concavities bisected by at least one of the two orthogonal axes that pass through said convexities or concavities is asymmetric with the other side thereof.

5. (Original) The substrate for a liquid crystal device according to Claim 4, wherein one side of a surface area of said spatial shape is asymmetric with the other side.

6. (Original) The substrate for a liquid crystal device according to Claim 4, wherein one angle of said spatial shape with respect to said base is asymmetric with another angle of said spatial shape with respect to said base.

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) The liquid substrate for a liquid crystal device according to Claim 32, wherein said plurality of convexities or said plurality of concavities are all in the same direction and randomly arranged within a plane.

10. (Currently Amended) The substrate for a liquid crystal device according to Claim 31, wherein at least one of said two orthogonal axes is parallel with the edge of said base.

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11. (Currently Amended) A substrate for a liquid crystal device that is one of a pair of substrates sandwiching a liquid crystal and that is positioned opposite from a viewing-side substrate, comprising a base and a light reflecting film formed on said base;

wherein at ~~least~~ least one of a plurality of convexities and a plurality of concavities are formed and arranged in a reflecting pattern on ~~said~~ a surface of said light reflecting film; and

with respect to an amount of light reflected on said reflection pattern, a profile of the amount of light along one of two orthogonal axes that pass through said convexities or said ~~valleys~~ concavities is different from the profile of the amount of light along the other of the two orthogonal axes.

12. (Original) The substrate for a liquid crystal device according to Claim 11, wherein said profile of the amount of light along said one axis is peak shaped, and said profile of the amount of light along said other axis is a straight line.

13. (Currently Amended) A method of manufacturing a substrate for a liquid crystal device comprising the steps of:

forming a light reflecting film on a surface of the base, and

employing a mask to form at least one of a plurality of convexities and a plurality of concavities, said convexities and concavities are pyramid shape in plane section, on the surface of said light reflecting film;

wherein a shape of a mask pattern of said mask for said convexities or said concavities along one axis of two orthogonal axes that pass through said convexities or concavities is different from the shape that extends along the other axis.

14. (Original) A method of manufacturing a substrate for a liquid crystal device comprising the steps of:

forming a light reflecting film on the surface of a base; and

employing a mask to form at least one of a plurality of convexities and a plurality of concavities on a surface of said light reflecting film;

wherein a shape of one side of a mask pattern of said mask for said plurality of convexities or said plurality of concavities that is bisected by at least one of two orthogonal axes that pass through said convexities or concavities is asymmetric with the other side thereof.

15. (Original) The method of manufacturing a substrate for a liquid crystal device according to Claim 14, wherein said mask patterns of said mask for said plurality of convexities or said concavities are a planar teardrop shape.

16. (Original) The method of manufacturing a substrate for a liquid crystal device according to Claim 14, wherein said mask patterns of said mask for said plurality of convexities or said concavities are in the same direction and are randomly arranged within a plane.

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17. (Currently Amended) A liquid crystal display device comprising:
a substrate for a liquid crystal device as set forth in claim 3; and
~~a pair of substrates, one substrate including a light reflecting film having a pattern that displays light directivity and light scattering; and~~
a liquid crystal sandwiched between the pair of substrates.

18. (Currently Amended) A method for manufacturing a liquid crystal display device comprising the steps of:
manufacturing a substrate for a liquid crystal device as set forth in claim 13
~~forming a light reflecting film on a substrate; and~~
~~employing a mask to form at least one of a plurality of convexities and a plurality of concavities on a surface of said light reflecting film;~~

~~wherein a shape of a mask pattern of said mask for said convexities or said concavities along one axis of two orthogonal axes that pass through said convexities or concavities is different from the shape that extends along the other axis.~~

19. (Currently Amended) An electronic apparatus comprising:

a liquid crystal display device;

a case accommodating said liquid crystal device,

said liquid crystal device comprisingincluding:

a liquid crystal display device as set forth in claim 17

~~a pair of substrates, one substrate including a light reflecting film having pattern that displays light directivity and light scattering; and~~

~~a liquid crystal sandwiched between the pair of substrates.~~

20. (NEW) A substrate for a liquid crystal device, comprising:

a base; and

a light reflecting film formed on said base, wherein said pattern is formed by aligning at least one of a plurality of convexities and a plurality of concavities, said convexities and concavities are teardrop shape in plane section, and said light reflecting film has a pattern that provides light directivity and light scattering, and

a spatial shape of said convexities or said concavities along one of two orthogonal axes that pass through said convexities or concavities is different from a spatial shape that extends along the other axis.

21. (NEW) A substrate for a liquid crystal device, comprising:

a base;

a light reflecting film formed on said base;

said light reflecting film having a pattern that provides light directivity and light scattering;

said pattern is formed by aligning at least one of a plurality of convexities and a plurality of concavities; and

said convexities and concavities are pyramid shape in plane section,

wherein one side of a spatial shape of said convexities or said concavities bisected by at least one of the two orthogonal axes that pass through said convexities or concavities is asymmetric with the other side thereof.

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22. (NEW) A substrate for a liquid crystal device, comprising:

a base;

a light reflecting film formed on said base;

said light reflecting film having a pattern that provides light directivity and light scattering;

said pattern is formed by aligning at least one of a plurality of convexities and a plurality of concavities; and

said convexities and concavities are teardrop shape in plane section;

wherein one side of a spatial shape of said convexities or said concavities are bisected by at least one of the two orthogonal axes that pass through said convexities or concavities is asymmetric with the other side thereof.

23. (NEW) A substrate for a liquid crystal device that is one of a pair of substrates sandwiching a liquid crystal and that is positioned opposite from a viewing-side substrate, comprising a base and a light reflecting film formed on said base;

wherein at least one of a plurality of convexities and a plurality of concavities are formed and arranged in a reflecting pattern on said surface of said light reflecting film;

said convexities and concavities are pyramid shape in plane section; and

with respect to an amount of light reflected on said reflection pattern, a profile of the amount of light along one of two orthogonal axes that pass through said convexities or said valleys is different from the profile of the amount of light along the other of the two orthogonal axes.

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24. (NEW) A substrate for a liquid crystal device that is one of a pair of substrates sandwiching a liquid crystal and that is positioned opposite from a viewing-side substrate, comprising a base and a light reflecting film formed on said base;

wherein at least one of a plurality of convexities and a plurality of concavities are formed and arranged in a reflecting pattern on said surface of said light reflecting film;

said convexities and concavities are teardrop shape in plane section; and

with respect to an amount of light reflected on said reflection pattern, a profile of the amount of light along one of two orthogonal axes that pass through said convexities or said concavities is different from the profile of the amount of light along the other of the two orthogonal axes.

25. (NEW) A method of manufacturing a substrate for a liquid crystal device comprising the steps of:

forming a light reflecting film on a surface of the base; and

employing a mask to form at least one of a plurality of convexities and a plurality of concavities, said convexities and concavities are teardrop shape in plane section on the surface of said light reflecting film;

wherein a shape of a mask pattern of said mask for said convexities or said concavities along one axis of two orthogonal axes that pass through said convexities or concavities is different from the shape that extends along the other axis.

26. (NEW) A method of manufacturing a substrate for a liquid crystal device comprising the steps of:

forming a light reflecting film on the surface of a base;

and employing a mask to form at least one of a plurality of convexities and a plurality of concavities, said convexities and concavities are pyramid shape in plane section on a surface of said light reflecting film;

wherein a shape of one side of a mask pattern of said mask for said plurality of convexities or said plurality of concavities that is bisected by at least one of two orthogonal axes that pass through said convexities or concavities is asymmetric with the other side thereof.

27. (NEW) A method of manufacturing a substrate for a liquid crystal device comprising the steps of:

forming a light reflecting film on the surface of a base; and

employing a mask to form at least one of a plurality of convexities and a plurality of concavities, said convexities and concavities are teardrop shape in plane section on a surface of said light reflecting film;

wherein a shape of one side of a mask pattern of said mask for said plurality of convexities or said plurality of concavities that is bisected by at least one of two orthogonal axes that pass through said convexities or concavities is asymmetric with the other side thereof.

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28. (NEW) The liquid substrate for a liquid crystal device according to Claim 4, wherein said plurality of convexities or said plurality of concavities are all in the same direction and randomly arranged within a plane.

29. (NEW) The substrate for a liquid crystal device according to Claim 4, wherein at least one of said two orthogonal axes is parallel with the edge of said base.

30. (NEW) The liquid substrate for a liquid crystal device according to Claim 20, wherein said plurality of convexities or said plurality of concavities are all in the same direction and randomly arranged within a plane.

31. (NEW) The substrate for a liquid crystal device according to Claim 20, wherein at least one of said two orthogonal axes is parallel with the edge of said base.

32. (NEW) The substrate for a liquid crystal device according to Claim 23, wherein said profile of the amount of light along said one axis is peak shaped, and said profile of the amount of light along said other axis is a straight line.

33. (NEW) The substrate for a liquid crystal device according to Claim 24, wherein said profile of the amount of light along said one axis is peak shaped, and said profile of the amount of light along said other axis is a straight line.

34. (NEW) A liquid crystal display device comprising:
a substrate for a liquid crystal device as set forth in claim 4; and
a liquid crystal sandwiched between the pair of substrates.

35. (NEW) A liquid crystal display device comprising:
a substrate for a liquid crystal device as set forth in claim 11; and
a liquid crystal sandwiched between the pair of substrates.

36. (NEW) A liquid crystal display device comprising:
a substrate for a liquid crystal device as set forth in claim 20; and
a liquid crystal sandwiched between the pair of substrates.

37. (NEW) A method for manufacturing a liquid crystal display device comprising the steps of:

manufacturing a substrate for a liquid crystal device as set forth in claim 14.

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38. (NEW) A method for manufacturing a liquid crystal display device comprising the steps of:

manufacturing a substrate for a liquid crystal device as set forth in claim 25.
